



Directional Coupler, CK-10K series

Ultra-wideband, Low-loss Stripline Coupler
617 - 3,800 MHz, 7-16 or 4.3-10
Rev. C

- ◆ Extended bandwidth for CBRS and Band43 applications
- ◆ Outdoor Salt Fog Qualified
- ◆ 6, 10, 15, & 20 dB Values
- ◆ Minimal RF Insertion Loss
- ◆ Guaranteed Low PIM
- ◆ 200 Watt Average Main Line Power
- ◆ 7-16 DIN or 4.3-10 Connectors
- ◆ RoHS Compliant



The CK-10K series of Directional Couplers is a tapered stripline design covering from 617 to 3,800 MHz. Units couple off a defined fraction of signal with minimal reflections or loss.

The extremely wide frequency range allows use with multiband antennas, leaky cable systems and wireless base stations. With minimal solder joints and a low loss dielectric, the dissipative loss has been minimized and reliability enhanced. Mounting brackets are included.

This product is designed for harsh outdoor applications in corrosive salt fog environments.

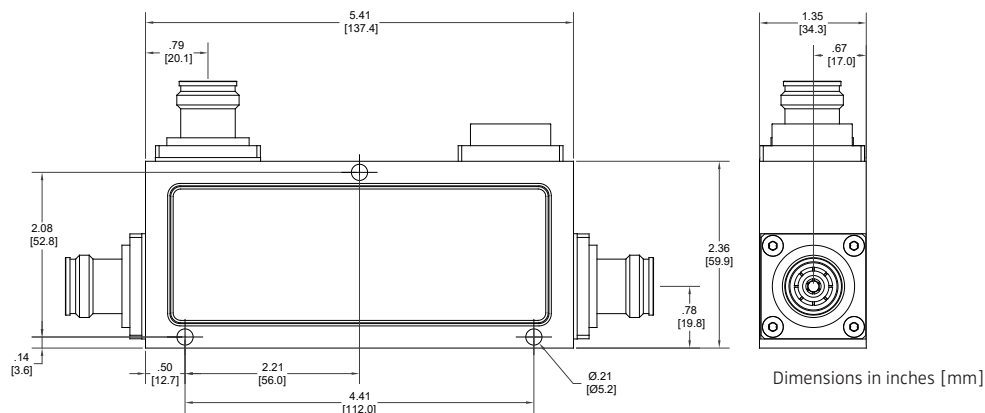
Frequency:	617-3800 MHz
VSWR	1.20:1 max., 617-2500 MHz 1.25:1 max., 2500-3300 MHz 1.40:1 max., 3300-3600 MHz 1.45:1 max., 3600-3800 MHz
PIM:	-161 dBc (-118 dBm) (2 tones at +43 dBm)
Power:	200 W avg., 1.5 kW pk*
Directivity:	20 dB min., 617-2500 MHz 18 dB min., 2500-3300 MHz 16 dB min., 3300-3600 MHz 14 dB min., 3600-3800 MHz
Impedance:	50Ω nominal
Environment:	0°C to +50°C, below 0°C coupling is maintained but directivity degrades. IP68 30 day salt fog. IAW ASTM-B117
Housing Finish:	Black Anodized
Connectors:	7-16 (f) or 4.3-10 (f) Triplate
Weight:	7-16 DIN: 2.45 lbs (1.1 kg), nominal 4.3-10: 2.13 lbs (0.97 kg), nominal

*Power may be limited by feeding into poorly matched loads overloading the termination.

Model Numbers		Coupling nom.	Frequency Sensitivity (MHz)				Coupled Loss
7-16 (f)	4.3-10 (f)		617-694	694-2500	2500-3600	3600-3800	
CK-15KD	CK-15KE	15 dB	+1.5/0.8 dB	+1.2/-0.8 dB	+1.2/-0.8 dB	+1.7/-1.3 dB	0.14 dB
CK-16KD	CK-16KE	6 dB	+1.0/-0.75 dB	±0.75 dB	±0.9 dB	±1.4 dB	1.26 dB
CK-17KD	CK-17KE	10 dB	+1.3/-1.0 dB	±1.0 dB	±1.0 dB	±1.5dB	0.45 dB
CK-18KD	CK-18KE	20 dB	+1.3/-1.0 dB	±1.0 dB	±1.0 dB	±1.5dB	0.04 dB

Dissipative Loss - <0.30 dB

Outline



Note: Specifications are subject to change without prior notification.

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